National FOIA Office
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (2310A)
Washington, DC 20460

Re: Freedom of Information Act Request

September 21, 2020

Dear Freedom of Information Officer:

Pursuant to the Freedom of Information Act, 5 U.S.C. § 552, and corresponding U.S. Environmental Protection Agency regulations, Physicians for Social Responsibility (PSR), a 501 (c)(3) nonprofit environmental organization, requests copies of the following records located within the EPA's Office of Pollution Prevention and Toxics (EPA OPPT) related to chemicals with premanufacture notice numbers P-11-0091, P-11-0092, and P-11-0093. EPA regulators were concerned that these chemicals, intended for use in oil and gas drilling or hydraulic fracturing ("fracking"), could degrade into perfluorinated products that could be persistent, bioaccumulative, and toxic.

Requested Records

1. Section 12(b) notice of export filed with EPA for any of the chemicals with EPA tracking numbers P-11-0091, P-11-0092, and/or P-11-0093, if applicable. A consent order for these chemicals said that "the PMN substances are expected to be imported," so it is possible that the substance was imported rather than exported.
2. Notice of Commencement filed with EPA for the chemicals with EPA tracking numbers P-11-0091, P-11-0092, and/or P-11-0093 including any reassertion and substantiation required by 40 CFR 720.85 (b) of the claim in the chemicals' premanufacture notice that the chemicals' identities be withheld from the public as a trade secret (e.g. answers to the required questions such as "what harmful effects to your competitive position, if any, do you think would result if EPA publishes on the Inventory the identity of the chemical substance?"). This code section requires companies to reassert and substantiate confidentiality claims for the chemical's identity when the chemical is manufactured or imported for commercial purposes. We know that EPA has received a Notice of Commencement for P-11-0091 indicating that such manufacture or importation began because EPA stated that it had received such notice in response to a previous FOIA request, # EPA-HQ-2014-004977.
3. Answers to the questions required by 40 CFR 720.90 (b) for the manufacturer to maintain a claim of confidentiality for the identity of the chemical with EPA tracking number P-11-0091 (and P-11-0092 and P-11-0092, if applicable). 40 CFR 720.90 (b) states that "to maintain the confidential status of the chemical identity of a chemical substance for which a health and safety study was submitted after commencement of manufacture or import, the claim must be reasserted and substantiated in conjunction with a claim under § 720.85(b)" and the manufacturer must answer several questions including "Do you

assert that disclosure of the chemical identity is not necessary to interpret any of the health and safety studies you have submitted?"

4. Similarly, EPA's determination according to 40 CFR 720.90 (c) as to whether any confidentiality claim should be denied under 40 CFR 720.90 (b) and the agency's basis for this determination. EPA must deny a claim of confidentiality under 40 CFR 720.90 (b) unless one of three conditions is met including "The specific chemical identity is not necessary to interpret a health and safety study."
5. Any records showing that the manufacturer of the chemicals with EPA tracking numbers P-11-0091, P-11-0092, and P-11-0093 provided waivers of trade secret claims that the manufacturer asserted in the premanufacture notice for these chemicals or in the consent order for these chemicals.
6. Did EPA review the claim of confidentiality for the specific chemical name of P-11-0091 (and P-11-0092 and P-11-0093, if applicable) as required by the updated Toxic Substances Control Act, 15 U.S.C. 2613 (g)(1)(C)(i) for chemicals that had previously been offered for commercial distribution? If so, what did EPA conclude?
7. Did EPA review any of the other claims of confidentiality for the chemical known as P-11-0091 (and P-11-0092 and P-11-0093, if applicable) as part of the EPA's obligation to review 25 percent of other confidentiality claims not related to specific chemical identities under the updated Toxic Substances Control Act, 15 U.S.C. 2613 (g)(1)(C)(ii)? If so, what did EPA conclude?
8. For the chemicals P-11-0091, P-11-0092, and P-11-0093, any Notice of Activity Form A or Form B including substantiation of confidentiality claims. These forms are required to be filed with EPA by 15 USC § 2607 and 40 CFR 710 under the updated Toxic Substances Control Act so that EPA can compile lists of active and inactive chemicals and can determine whether manufacturers want to, or should, maintain confidentiality claims for specific chemical identities or other information.
9. On which TSCA chemical inventory list are P-11-0091, P-11-0092, and P-11-0093 listed, the confidential list or non-confidential list?
10. Health and safety studies submitted to EPA for the chemicals with EPA tracking numbers P-11-0091, P-11-0092, and P-11-0093 and "any data reported to, or otherwise obtained by, the Administrator from a health and safety study which relates to" the chemicals with the abovementioned EPA tracking numbers. Section 14 (b) of the version of TSCA that was in effect when the premanufacture notice was submitted provides that if EPA receives a request for health and safety studies under the Freedom of Information Act for a chemical that has been offered for commercial distribution, EPA shall not deny the request on the basis of trade secret claims unless the data "discloses processes used in the manufacturing or processing of a chemical substance or mixture, or in the case of a mixture, the release of data disclosing the portion of the mixture comprised by any of the chemical substances in the mixture." Our request includes the health and safety studies submitted by the chemicals' manufacturer in the premanufacture notice including any safety data sheets, studies requested by EPA under a consent order associated with these substances and any tests conducted by other companies that EPA referenced in the consent order.
11. Under the premanufacture program, and since March 17, 2014 when FOIA # EPA-HQ-2014-004977 was filed, has EPA allowed any other chemicals to be used in oil and natural gas drilling and/or fracking and/or acid fracturing that contain, or could degrade

into, perfluorinated substances? If so, please provide EPA's regulatory determinations regarding these chemicals including initial health assessments (Structure Activity Team reports), initial regulatory determinations (FOCUS reports), final health assessments (final health and/or risk assessments and final regulatory determinations (disposition meeting reports). For the same substances, please provide any associated health and safety studies and notices of commencement.

Separately, we ask the following questions. The answers may or may not be subject to the FOIA. If not, we would still appreciate answers from EPA staff outside the bounds of the FOIA.

1. When the Focus Report for P-11-0091, P-11-0092, and P-11-0093 dated 1/3/2011 discusses the "incomplete incineration" product and the consent order discusses "concerns for potential incineration," under what scenario(s) would such incomplete incineration or incineration occur? Does the "incineration" refer to incineration of the chemical when oil containing the chemical is shipped to a refinery and heated, a scenario contemplated in Emission Scenario Document on Chemicals Used in Oil Well Production, OECD Environment, Health and Safety Publications, No. 31 Series on Emission Scenario Documents? Or does it refer to some type of disposal of the chemical, also suggested by the same OECD document? Or does it refer to flaring of oil and gas wells during which the chemical might undergo incomplete incineration?
2. Why did EPA allow P-11-0091 (and P-11-0092 and P-11-0093, if applicable) to be manufactured commercially despite the agency's health concerns?
3. Has EPA tracked where chemical number P-11-0091 (and P-11-0092 and P-11-0093, if applicable) has been used?
4. Have EPA or other researchers tested for P-11-0091 (and P-11-0092 and P-11-0093, if applicable) in the environment to see if, as EPA was concerned, perfluorinated degradation products or other contaminants were released, if they have bioaccumulated or biomagnified, or if they have been toxic to people and/or animals? If so, who performed the testing? Where and when were the tests taken? And what were the test results?
5. Did EPA consider the possibility of exposure to, or releases of, the chemical through leaks, spills, underground migration, and blowouts or other air pollution associated with oil and gas drilling and fracking or such accidental releases related to disposal of drilling/fracking wastewater in underground injection wells? If so, did EPA believe serious impacts to health or the environment would occur? Why or why not?
6. Did EPA consider the potential that drilling/fracking wastewater could be treated at a wastewater treatment plant and then discharged to a waterway? If so, did EPA believe serious impacts to health or the environment would occur? Why or why not?
7. Did EPA consider the potential that using drilling/fracking wastewater containing the chemical in irrigation could enter the food supply? If so, did EPA believe serious impacts to health or the environment would occur? Why or why not?
8. Did EPA consider the potential that people or the environment could be exposed to the chemical if it were taken to evaporation or percolation ponds? If so, did EPA believe serious impacts to health or the environment would occur? Why or why not?
9. Has EPA updated its exposure scenarios for chemicals used in drilling and/or fracking to account for leaks and spills or other types of accidental releases? According a report

issued by Partnership for Policy Integrity, EPA staff said in 2016 that the agency was going to develop a new exposure scenario document for hydraulic fracturing that would include the potential for leaks and spills.[1] EPA's exposure scenario documents for oil and gas drilling/fracking as of April 2016 did not account for the potential for leaks, spills, underground migration and, with one exception, the potential that chemicals might become airborne. EPA used these exposure scenarios in assessing health and environmental risks from oil and gas chemicals. It is unclear whether the updated scenario for fracking has been completed and/or used in assessing chemical risks.

10. Why did EPA apparently omit mention of this chemical from its 2016 national study of fracking and drinking water? EPA allowed P-11-0091 to be used commercially, apparently as of 2012 and received a notice of commencement that the chemical was being manufactured commercially or imported for commercial use as early as March 2014 when FOIA # EPA-HQ-2014-004977 was filed, two years before publication of the 2016 national study of fracking and drinking water. However, P-11-0091's generic name, "fluorinated acrylic alkylamino copolymer," does not appear in the 666-page 2016 report. Nor does the 2016 report contain several words and/or terms related to EPA's concerns about the perfluorinated degradation product of P-11-0091 included in a consent order regarding P-11-0091. These words that do not appear in the 2016 report include "perfluorooctanoic acid," "PFOA," and "perfluoroalkyl." The only terms that appear in the 2016 report that seem similar to those associated with the perfluorinated nature of the degradation product are brief references to various substances used as tracers including "fluorocarbons," "fluorinated organics," and "fluorinated tracers" on page 5-14; several types of "fluorocarbons" on page 5-15; "perfluorocarbon tracers" on page 6-54; and "fluorocarbons" used as tracers on page 7-23. It is unclear whether the chemicals P-11-0091, P-11-0092, and P-11-0093 are used as tracers. If they are not, it appears that there is no reference to these chemicals in the 2016 report.

Request for Fee Waiver

Physicians for Social Responsibility (PSR) requests that the EPA waive any and all fees associated with this FOIA request in accordance with 5 U.S.C. § 552 (a)(4)(A)(iii), 40 C.F.R. § 2.107 (l). PSR should qualify for a fee waiver because our request "is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester."

Below we address each of the criteria that the EPA shall use in determining whether fees should be waived:

1) The records requested concern the operations or activities of the government.

The records PSR seeks are produced by EPA, an agency of the federal government and are generated as part of EPA's mission to protect the public from chemical risks.

2) Disclosure of the records requested is likely to contribute to public understanding of those

[1] Dusty Horwitt. Toxic Secrets. Partnership for Policy Integrity (April 7, 2016), at 26-27. Visited Sept. 15, 2020 at http://www.pfpi.net/toxic-secrets-companies-exploit-weak-us-chemical-rules-to-hide-fracking-risks.

operations or activities.

The records are likely to contribute to the public's understanding of how EPA evaluates and regulates chemicals used in oil and natural gas drilling and hydraulic fracturing. The records are likely to illuminate how EPA evaluates chemical manufacturers' requests for trade secret protection, particularly for chemicals' identities. The records are also likely to contribute to the public's understanding of the characteristics of the chemicals submitted for review and what risks the EPA foresees due to the use of such chemicals. It is not widely known that EPA reviews new chemicals used for oil and natural gas drilling and hydraulic fracturing and EPA's analyses and determinations are not widely known, either. We are not aware that anyone has yet publicly identified the use of chemicals in oil and gas drilling that are likely to degrade into perfluorinated substances. This last piece of information, in particular, is not already in the public domain (see discussion in #4 below).

3) Disclosure of the records will contribute to the understanding of a reasonably broad audience of people interested in the issue.
Oil and gas drilling is occurring in more than 30 states[2] and a peer-reviewed study published in 2017 found that almost 18 million people lived within one mile or an oil or natural gas well.[3] The 2017 study suggested that people could be affected by air pollution as far as 9,800 feet (almost two miles) from a point source.[4] In an analysis published in 2012 of New York State's plan to allow shale gas drilling (a practice banned by New York in 2014), the U.S. Geological Survey found that in some cases, it might be necessary to prohibit drilling in a five square mile area surrounding aquifers to avoid polluting them, suggesting that contaminants from drilling could migrate several miles underground.[5] Therefore, a significant number of people could be exposed to chemicals used in drilling and fracking.

In recent years, the media has shown significant interest in EPA's regulation of chemicals proposed for use in oil and gas drilling and fracking, suggesting that there would be broad public interest in the information sought in this FOIA request. In 2017, *Marketplace* on *NPR* broadcast a two-part series on an investigation by the nonprofit Partnership for Policy Integrity (PFPI) of EPA's regulation of oil and gas chemicals under the Toxic Substances Control Act (TSCA).[6]

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[2] U.S. Dept. of Energy, Energy Information Administration, Petroleum & Other Liquids, Data, Crude Oil Production, Annual – Thousand Barrels (showing oil production in 32 states in 2020). Visited Sept. 11, 2020 at https://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbl_a.htm. U.S. Dept. of Energy, Energy Information Administration, Natural Gas, Data, Gross Withdrawals and Production, Gross Withdrawals, Annual-Million Cubic Feet (showing natural gas production in 33 states in 2018). Visited Sept. 11, 2020 at https://www.eia.gov/dnav/ng/ng_prod_sum_a_EPG0_FGW_mmcf_a.htm.

[3] Eliza D. Czolowski et al. Toward Consistent Methodology to Quantify Populations in Proximity to Oil and Gas Development: A National Spatial Analysis and Review. Environmental Health Perspectives, Vol. 125, No. 12 (Dec. 7, 2017). Visited Sept. 11, 2020 at https://ehp.niehs.nih.gov/doi/10.1289/EHP1535.

[4] Id.

[5] U.S. Geological Survey, New York Water Science Center, Comments on the Revised Draft Supplemental Generic Environmental Impact Statement (2012), at 6. Visited Sept. 11, 2020 at https://www.ewg.org/sites/default/files/report/ReviseddraftSGEIS_USGScomments_Version3_0.pdf.

[6] Scott Tong. Documents Show Undisclosed EPA Health Concerns on Fracking Chemicals. Marketplace (Nov. 14, 2017). Visited Sept. 11, 2020 at https://www.marketplace.org/2017/11/14/world/documents-show-undiscosed-epa-health-concerns-fracking-chemicals-0. Scott Tong. "The Public Has a Right to Know": Fracking Companies Don't

That investigation focused on documents released in response to a previous FOIA request. Included among those previously-released documents are the documents showing EPA's regulation of chemicals P-11-0091, P-11-0092, and P-11-0093 that are the subject of this FOIA request. The documents related to P-11-0091, P-11-0092, and P-11-0093 were not analyzed in that investigation. The investigation prompted more than 100 health professionals to write to EPA requesting that EPA disclose the identities of 41 oil and gas chemicals that were regulated by EPA and had chemical identities hidden from the public as trade secrets. The health professionals included several members of PSR.[7] This petition to EPA received media coverage as part of Marketplace's series as well as in several local newspapers in Ohio and West Virginia.[8] Also in 2017, the major scientific publisher, Elsevier, published a textbook about hydraulic fracturing. The book included a chapter on hydraulic fracturing chemical disclosure that featured a summary of PFPI's investigation of EPA's regulation of oil and gas chemicals under TSCA and included excerpts of documents disclosed by EPA as a result of that investigation.[9] In 2018, PFPI published a report on the use of drilling and fracking chemicals in Pennsylvania with chemical identities hidden from the public as trade secrets. The report focused in part on the EPA's regulation of oil and gas chemicals under TSCA and noted that the chemicals with identities hidden under trade secret protection in Pennsylvania could be some of the same chemicals regulated by EPA whose identities are hidden by trade secret protections at the federal level. This report received coverage from several media outlets in Pennsylvania and New Jersey where residents were concerned about pollution of the Delaware River by drilling and fracking chemicals. The outlets included NJ Spotlight, the Philadelphia Business Journal, StateImpact, and the Scranton Times-Tribune.[10] In 2019, PFPI published a similar report about

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Have to Disclose Chemicals Linked to Health Concerns. Marketplace (Nov. 15, 2017). Visited Sept. 11, 2020 at https://www.marketplace.org/2017/11/15/sustainability/epas-legalized-suppression-fracking-chemical-secrets.

[7] Letter from Chas Adams, Assistant Chief, Franklin Township Fire Department, Columbus, OH et al to Scott Pruitt, EPA Administrator regarding a request that EPA reveal the chemical identities of 41 oil and gas chemicals regulated under the Toxic Substances Control Act. Visited Sept. 11, 2020 at http://www.pfpi.net/wp-content/uploads/2017/11/LettertoEPAredrillingfrackingchemicals11.15.2017.pdf.

[8] The Intelligencer/Wheeling News-Register (W.Va.). Belmont County Emergency Officials Seek Ingredients in Hydraulic Fracturing Fluid (Dec. 1, 2017). Visited Sept. 14, 2020 at http://www.theintelligencer.net/news/community/2017/12/belmont-county-emergency-officials-seek-ingredients-in-hydraulic-fracturing-fluid/. The Times Leader (Martin's Ferry, Ohio). Fracking Chemical Clarity is Requested (Dec. 1, 2017). [On file with PSR.] Weirton (W.Va.) Daily Times. First Responders Ask for Transparency for Fracking Chemicals (Dec. 2, 2017). Visited Sept. 14, 2020 at http://www.weirtondailytimes.com/news/local-news/2017/12/first-responders-ask-for-transparency-for-fracking-chemicals/. Steubenville (Ohio) Herald-Star. Responders Seeking Fracking Chemical Identities (Dec. 2, 2017). Visited Sept. 14, 2020 at http://www.heraldstaronline.com/news/local-news/2017/12/responders-seeking-fracking-chemical-identities/.

[9] Kevin Schug and Zacariah L. Hildenbrand. Environmental Issues Concerning Hydraulic Fracturing, Vol. 1, at 63-111 (2017).

[10] See, e.g. Tom Johnson. Governor Urged to Block Discharge of Fracking Waste in Delaware River Basin. NJ Spotlight (Sept. 13, 2018). Visited Sept. 11, 2020 at https://www.njspotlight.com/2018/09/18-09-12-governor-urged-to-block-discharge-of-fracking-waste-in-delaware-river-basin/. Mike Larson, Report: More than half of Pennsylvania gas wells used 'secret' fracking chemicals. Philadelphia Business Journal (Sept. 17, 2018). Visited Sept. 11, 2020 at https://www.bizjournals.com/philadelphia/news/2018/09/17/pennsylvania-gas-wells-fracking-epa.html. Scranton Times-Tribune. Editorial: Disclose All Fracking Chemicals (Sept. 12, 2018). [Subscriber access only, but copy on file with PSR.] Visited Sept. 11, 2020 at https://www.thetimes-tribune.com/opinion/editorial/disclose-all-fracking-chemicals/article_dec02b61-a266-5595-9ad9-fc3783bc2b92.html. Jon Hurdle. More than half PA gas wells used 'secret' chemicals for fracking or drilling, report says. StateImpact (Sept. 14, 2018). Visited Sept. 11, 2020 at

the use of trade secret drilling and fracking chemicals in Ohio. This report contained similar information about EPA's regulation of oil and gas chemicals under TSCA and similarly received wide media coverage in outlets in Ohio and West Virginia such as the Akron Beacon Journal, Canton Repository, and Columbus Dispatch as well as in Newsweek.[11]

A reasonably broad audience is also likely to be interested in the information sought under this FOIA request because of the significant public interest in perfluorinated chemicals. Late last year, Focus Features released a feature movie, *Dark Waters*, starring Mark Ruffalo, about an investigation into pollution and health impacts caused by Dupont's manufacture and disposal of perfluorooctanoic acid or PFOA.[12] EPA regulators believed that the chemicals that are the subject of this FOIA request would degrade into perfluorinated substances that are analogous to PFOA. The movie about PFOA was inspired by an article published in 2016 in the *New York Times Magazine* about the attorney who investigated the pollution caused by PFOA.[13] EPA, itself, has multiple web pages devoted to so-called "PFAS" or per- and polyfluoroalkyl substances such as PFOA including a page entitled "Basic Information on PFAS," reflecting the public's interest in, and concern about, these substances.[14] States have moved to investigate and set standards to control pollution related to PFAS, and major news outlets have covered these efforts.[15] The attention of Hollywood, EPA, lawmakers, and the news media reflects the fact that the public is likely to be highly interested in the information sought by this FOIA request.

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https://stateimpact.npr.org/pennsylvania/2018/09/11/more-than-half-pa-gas-wells-used-secret-chemicals-for-fracking-or-drilling-report-says/.

[11] Beth Burger. Energy policy group calls for public disclosure of chemicals used in fracking. Akron Beacon Journal (Sept. 16, 2019). Visited Sept. 11, 2020 at https://www.beaconjournal.com/news/20190916/energy-policy-group-calls-for-public-disclosure-of-chemicals-used-in-fracking. Shane Hoover. Industry report: Secret chemicals used in fracking. Canton Repository (Sept. 16, 2019). Visited Sept. 11, 2020 at https://www.cantonrep.com/news/20190916/industry-report-secret-chemicals-used-in-fracking. Beth Burger. What's in fracking chemicals? Energy nonprofit demands answers. The Columbus Dispatch. (Sept. 16, 2019). Visited Sept. 11, 2020 at https://www.dispatch.com/news/20190916/whats-in-fracking-chemicals-energy-nonprofit-demands-answers. Jeffery Martin. Colorado Fracking Study Shows Toxic Chemicals Up to 2,000 Feet Away From Drilling Sites. Newsweek (Oct. 17, 2019). Visited Sept. 11, 2020 at https://www.newsweek.com/colorado-fracking-study-shows-toxic-chemicals-2000-feet-away-drilling-sites-1466091.

[12] Focus Features. *Dark Waters*. Official Trailer. Visited Sept. 14, 2020 at https://www.focusfeatures.com/dark-waters/about.

[13] Nathaniel Rich. The Lawyer Who Became Dupont's Worst Nightmare. New York Times (Jan. 6, 2016). Visited Sept. 14, 2020 at https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html?searchResultPosition=1.

[14] U.S. Environmental Protection Agency. Basic Information on PFAS. Visited Sept. 14, 2020 at https://www.epa.gov/pfas/basic-information-pfas.

[15] See, e.g., Keith Matheny. Michigan's Drinking Water Standards for These Chemicals Now Among Toughest in the Nation. Detroit Free Press (Aug. 3, 2020). Visited Sept. 14, 2020 at https://www.freep.com/story/news/local/michigan/2020/08/03/tougher-pfas-standards-drinking-water-michigan/5574268002/. David Abel. Massachusetts Sets New Standards for 'Forever Chemicals' in Water Supply. Boston Globe (Dec. 13, 2019). Visited Sept. 14, 2020 at https://www.bostonglobe.com/metro/2019/12/13/massachusetts-issues-new-standards-for-forever-chemicals-water-supply/dz25i9Sk92QfiDl5TeSJFL/story.html.

PSR has the expertise, ability, and intention to effectively convey this information to the public. PSR has hired Dusty Horwitt as a consultant to research and write about issues related to EPA's regulation of oil and gas chemicals. He will analyze any records EPA delivers in response to the FOIA request and will help disseminate information about the records to the public. Horwitt led Partnership for Policy Integrity's investigation of EPA's regulation of oil and gas chemicals mentioned above. He was the author of the organization's reports related to the investigation including the reports about the use of trade secret fracking chemicals in Ohio and Pennsylvania. He also wrote the previously mentioned textbook chapter on fracking chemical disclosure that included information about EPA's regulation of oil and gas chemicals under TSCA. Conducting this work required Horwitt to gain legal and technical knowledge about EPA's regulation of oil and gas chemicals that he would use to interpret and help disseminate any information obtained as a result of this FOIA request. The work also involved collaboration with scientific and technical experts who could help Horwitt interpret any responses to the FOIA request including scientist Zachariah Hildenbrand who co-edited the textbook to which Horwitt contributed a chapter on fracking chemical disclosure. Hildenbrand supervised Horwitt's work on the chapter and has published peer-reviewed papers on chemical-related pollution associated with oil and gas drilling. Another expert who has offered to help Horwitt analyze any documents produced by EPA is David Brown, a toxicologist who has investigated health effects associated with unconventional gas drilling with the Southwest Pennsylvania Environmental Health Project. Brown also served on an expert advisory committee to the Massachusetts Department of Environmental Protection's Office of Research and Standards to help the state set a standard for PFAS in drinking water. And a third expert who has offered to help interpret any documents is Silverio Caggiano, a battalion chief with the Youngstown, Ohio Fire Department and an original member of the Ohio Hazardous Materials and Weapons of Mass Destruction Technical Advisory Committee. Caggiano has worked with AFFF firefighting foam that includes perfluorinated substances that are likely related to the degradation product of the chemical that is the focus of this FOIA request.

Previous to his employment at Partnership for Policy Integrity, Horwitt worked for a decade at the nonprofit organizations Environmental Working Group and Earthworks where he also gained experience researching and disseminating information related to chemical risks from oil and gas drilling. In 2010, Horwitt authored a report on petroleum distillates used in hydraulic fracturing fluid including diesel, kerosene, and mineral spirits.[16] Writing the report required an analysis of scientific papers regarding the benzene levels of various petroleum distillates and consulting with technical experts. The report received media coverage in the Dallas Morning News[17] and New York Times.[18] In 2011, Horwitt authored a detailed investigation of EPA's conclusion in a 1987 report to Congress that hydraulic fracturing can – and did – contaminate groundwater.[19] The

[16] Dusty Horwitt, Drilling Around the Law, Environmental Working Group (Jan. 20, 2010). Visited Sept. 14, 2020 at http://www.ewg.org/research/drilling-around-law.
[17] Randy Lee Loftis, "Loophole Lets Gas Drillers Inject Chemical; Texas Official Says Water Untainted," Dallas Morning News (Jan. 19, 2010), https://e85vehicles.com/e85/index.php?/topic/3085-more-fracking-problems/&tab=comments#comment-22110
[18] Ian Urbina. "Millions of Gallons of Hazardous Chemicals Injected Into Wells, Report Says," New York Times (April 17, 2011) at A15. Visited Sept. 14, 2020 at https://www.nytimes.com/2011/04/17/science/earth/17gas.html.
[19] Dusty Horwitt. Cracks in the Façade, Environmental Working Group (Aug. 3, 2011). Visited Sept. 14, 2020 at http://static.ewg.org/reports/2011/Cracks-in-the-Facade.pdf?_ga=1.151820794.2134579904.1411238217.

investigation required consultation with scientific experts about potential pathways through which hydraulic fracturing fluids could contaminate groundwater. Horwitt's publication received coverage in the New York Times,[20] Pittsburgh Post-Gazette,[21] Charleston Gazette[22] and ProPublica.[23] In 2012, Horwitt coauthored comments to EPA regarding the agency's then-proposed guidance for ensuring compliance with a provision in the Safe Drinking Water Act that drilling companies must receive a permit before conducting hydraulic fracturing with diesel fuel.[24] The comments required consultation with a technical expert and a review of alternate chemical definitions of "diesel." This experience would also help Horwitt to analyze and disseminate any responses to the FOIA request.

Horwitt's additional relevant experience includes testifying about natural gas drilling and hydraulic fracturing risks five times before the New York City Council's Committee on Environmental Protection. He has also testified about natural gas drilling and hydraulic fracturing including chemicals used in these processes before local government panels in Plain Township, Ohio (Board of Trustees), Greenfield Township, Pennsylvania (Board of Supervisors), Fairfax County, Virginia (Environmental Quality Advisory Council), Washington County, Virginia (Board of Supervisors and Planning Commission) and Washington, D.C. (Advisory Neighborhood Commission 2A).

PSR also has a track record of analyzing and disseminating technical scientific information about oil and gas issues related to the information that might be contained in any response to the FOIA request. PSR is a physician and health activist 501(c)(3) organization whose mission is to protect human life from the gravest threats to health and survival. Founded in 1961, and co-recipient of the Nobel Peace Prize in 1985, PSR works at the intersection of public health, the environment, and social justice, collaborating with public health and equity advocates to address climate change, environmental health, and nuclear weapons policy. Led by a board of activist physicians, nurses, and public health professionals, the PSR community includes over 30,000 health activists and 24 chapters in major cities and medical schools throughout the United States. Among other projects, PSR has published, along with Concerned Health Professionals of New York, the *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of*

[20] Ian Urbina. A Tainted Water Well, and Concern There May be More, New York Times (Aug. 4, 2011), at A13. Visited Sept. 14, 2020 at https://www.nytimes.com/2011/08/04/us/04natgas.html#:~:text=For%20decades%2C%20oil%20and%20gas,never%20contaminated%20underground%20drinking%20water.

[21] Don Hopey, D.C. Group Says 1982 Incident Shows Risk of Fracking (Aug. 4, 2011). Visited Sept. 14, 2020 at http://www.post-gazette.com/local/region/2011/08/04/D-C-group-says-1982-incident-shows-risk-of-fracking/stories/201108040263.

[22] Ken Ward, West Virginia Well Pollution Cited in Drilling Debate, Charleston Gazette (Aug. 3, 2011). Visited Sept. 14, 2020 at http://www.wvgazette.com/News/201108031067.

[23] Abrahm Lustgarten, Does an Old EPA Fracking Study Provide Proof of Contamination? ProPublica (Aug. 4, 2011). Visited Sept. 14, 2020 at http://www.propublica.org/article/does-an-old-epa-fracking-study-provide-proof-of-contamination.

[24] Thomas Cluderay and Dusty Horwitt, Environmental Working Group comments on U.S. Envtl. Prot. Agency's Permitting Guidance for Oil and Gas Hydraulic Fracturing Activities Using Diesel Fuels, Docket ID No. EPA-HQ-OW-2011-1013. Visited Sept. 14, 2020 at http://www.ewg.org/news/testimony-official-correspondence/epa-must-do-more-prevent-diesel-fracking-fluid-threatening.

Fracking (Unconventional Gas and Oil Extraction).[25] Now in its sixth edition, this 361-page publication summarizes and links to an almost encyclopedic compilation of reports, peer-reviewed articles and investigative reporting on fracking's dangerous impacts on health. Editions of the Compendium have been used and referenced around the world. The Compendium has been twice translated into Spanish: independently in 2014 by an environmental coalition based in Madrid, followed by an official translation of the third edition, which was funded by the Heinrich Böll Foundation and launched in Mexico City in May 2016. The Compendium has been used in the European Union, South Africa, the United Kingdom, Australia, Mexico, and Argentina. The publication includes many entries about chemical risks and was reviewed by a group of peer readers who could help PSR interpret and disseminate any responses to this FOIA request. These readers include Walter Tsou, MD, MPH, former health commissioner of Philadelphia and former president of Philadelphia Physicians for Social Responsibility. Separately, PSR's experts have regularly appeared in media outlets about oil and natural gas-related issues including Alan Lockwood, MD, who was quoted in a story in Newsweek in 2019, about potential health impacts from oil and gas fracking and serves on PSR's national board,[26] Brita E. Lundberg, MD, who coauthored an article about natural gas in the *New England Journal of Medicine* in 2020, and serves on the board of PSR's Greater Boston chapter,[27] Barbara W. Brandom, MD, who authored an opinion piece about fracking and petrochemical impacts in the *Philadelphia Inquirer* in 2020 and is a member of PSR,[28] and Cory Carroll, MD, who authored a recent opinion piece in the Fort Collins *Coloradoan* about pollution associated with natural gas, and chairs the board of PSR's Colorado chapter.[29]

After obtaining the records sought by the FOIA request that is the subject of this appeal, PSR, in conjunction with contractor Horwitt, intends to draw on its expertise in analyzing information about oil and gas chemicals to analyze the EPA's records and publish one or more reports on its findings. As with the previous work that PSR and Horwitt have authored that has received coverage from local, regional, and national media, PSR will disseminate this new work to media outlets, government officials, and the public. Based on PSR and Horwitt's track record of placing stories in the media about oil and natural gas drilling chemicals, our experience testifying before government bodies and speaking to citizens groups[30] about these issues, we are confident that we

[25] Concerned Health Professionals of New York and Physicians for Social Responsibility. Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction) Visited Sept. 14, 2019 at https://www.psr.org/wp-content/uploads/2019/06/compendium-6.pdf.
[26] Jeffery Martin. Colorado Fracking Study Shows Toxic Chemicals Up to 2,000 Feet Away From Drilling Sites. Newsweek (Oct. 17, 2019). Visited Sept. 11, 2020 at https://www.newsweek.com/colorado-fracking-study-shows-toxic-chemicals-2000-feet-away-drilling-sites-1466091.
[27] Philip J. Landrigan et al. The False Promise of Natural Gas. New England Journal of Medicine, 382: 104-107 (January 9, 2020). Visited Sept. 18, 2020 at https://www.nejm.org/doi/full/10.1056/NEJMp1913663.
[28] Barbara W. Brandom. Pennsylvania Should Not Bolster Fracking and Petrochemicals with Latest Bill. Philadelphia Inquirer (March 18, 2020). Visited Sept. 18, 2020 at https://www.inquirer.com/opinion/commentary/pennsylvania-fracking-petrochemicals-house-bill-1100-20200318.html.
[29] Cory Carroll. Opinion: PRPA Should Not Build a Gas-Fired Power Plant. Fort Collins Coloradoan (September 20, 2020). Visited Sept. 21, 2020 at https://www.msn.com/en-us/weather/topstories/opinion-prpa-should-not-build-a-gas-fired-power-plant/ar-BB19cMqf.
[30] Robert McCartney, "D.C. Region Needs to Dig up the Facts about Fracking," Washington Post (Feb. 2, 2014), at C1. Visited Sept. 14, 2020 at http://www.washingtonpost.com/local/fracking-in-george-washington-national-forest-could-threaten-dc-area-drinking-water/2014/02/01/834cb8d2-8ad5-11e3-916e-e01534b1e132_story.html (reporting on public forum Dusty Horwitt helped organize in Arlington, Va. regarding risks of horizontal drilling and hydraulic fracturing in the George Washington National Forest including use of fracking chemicals). Janelle Germanos,

will provide broad exposure for the information requested and that we will make a significant contribution to public understanding.

4) The disclosure of the information is likely to contribute significantly to public understanding.

Disclosure of the information is likely to significantly enhance the public's understanding of the characteristics of chemicals EPA regulates for use in oil and natural gas drilling operations, the agency's analyses of these chemicals and the agency's regulatory determinations because, to our knowledge, the existence of the review process for these chemicals is not widely known. In addition, it is even less well-known that perfluorinated chemicals are associated with oil and gas drilling and fracking. Various nonprofit organizations and government bodies have analyzed health effects of drilling and hydraulic fracturing chemicals including Earthworks,[31] Environmental Working Group,[32] The Endocrine Disruption Exchange[33] and members of the U.S. House of Representatives' Energy and Commerce Committee.[34] However, prior to PFPI's publication in 2016 of a report entitled "Toxic Secrets," neither these investigations nor, to our knowledge, any other sources, had mentioned EPA's review of the health and environmental risks of hydraulic fracturing and drilling chemicals under the New Chemicals program. We are still not aware that any environmental organizations have mentioned the association of perfluorinated substances with oil and gas drilling. EPA's 666-page national study on fracking and drinking water makes brief mention that tracers used in oil and gas drilling are apparently fluorinated. However, the report does not appear to mention the oil and gas chemicals that are the subject of this request that are likely to degrade into a perfluorinated substance. Therefore, disclosure of the information requested is likely to significantly enhance the public's knowledge by informing citizens about a previously unknown type of chemical regulated by EPA that is associated with oil and gas drilling and/or fracking.

5 and 6) There is no commercial interest in disclosure of the requested records.

Disclosure of the requested records would not be in PSR's commercial interest, because PSR is a 501(c)(3) nonprofit organization. PSR has no intention of using these records or the information they contain in a manner that furthers a commercial, trade, or profit interest. Any analysis of this

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"Residents Concerned About 'Fracking in Our Backyard,'" The Connection Newspapers (May 6, 2014). Visited Sept. 14, 2020 at http://www.connectionnewspapers.com/news/2014/apr/03/residents-concerned-about-fracking-our-backyard/ (reporting on presentation by Dusty Horwitt to group of citizens in Fairfax County, Va. about risks of horizontal drilling and hydraulic fracturing in the George Washington National Forest including use of fracking chemicals).

[31] Lisa Sumi, Our Drinking Water at Risk: What EPA and the Oil and Gas Industry Don't Want Us to Know About Hydraulic Fracturing, Earthworks (2005). Visited Sept. 14, 2020 at https://www.earthworks.org/publications/our_drinking_water_at_risk/#:~:text=Our%20Drinking%20Water%20at%20Risk%3A%20What%20EPA%20and,at%20Risk%20reveals%20that%20study%20to%20be%20inadequate., at 3-21 (the report discusses fracturing chemicals on other pages as well).

[32] Dusty Horwitt, Drilling Around the Law, Environmental Working Group (Jan. 20, 2010). Visited Sept. 14, 2020 at http://www.ewg.org/research/drilling-around-law.

[33] The Endocrine Disruption Exchange, Drilling and Fracking Chemicals Spreadsheet. Visited Sept. 14, 2020 at https://endocrinedisruption.org/audio-and-video/chemical-health-effects-spreadsheets.

[34] U.S. House of Representatives Committee on Energy and Commerce Minority Staff. Chemicals Used in Hydraulic Fracturing (April 2011). [On file with PSR].

information would be conducted to educate the public about the EPA's review and regulation of the chemicals that are the subject of the FOIA request.

For the foregoing reasons, the disclosure of the information requested is in the public interest. Please waive processing and copying fees pursuant to 40 C.F.R. 2.107. This request for a fee waiver should not be construed as an extension of time in which to reply to this FOIA request.

PSR respectfully requests that the EPA make every effort to respond to this request within the 20-day limit required by your regulations, 40 C.F.R. 2.104. If you determine that portions of the records requested are exempt from disclosure, please segregate the exempt portions and send the remaining records within the statutory time limits. For any records or portions of records that you determine to be exempt, please provide a specific description of the record or portion of the record exempted, as well as a justification of the exemption.

Finally, PSR requests that the agency send all responsive records in an electronic format (e.g., .xls, .doc, .pdf, .jpeg, .mp3, and/or .mp4). If honoring this request would incur prohibitive additional costs for the agency, or substantially delay the time in which the agency is able to honor this FOIA request, PSR will accept records in hard copy or other format more expedient and economical for the agency to produce. Because of the pandemic, we are not working from our office and do not regularly collect any mail that might be delivered there. Therefore, if EPA decides to mail records, please contact me by email at bgottlieb@psr.org so we can arrange an appropriate mailing address.

Sincerely,

Barbara Gottlieb
Director for Environment and Health
Physicians for Social Responsibility
bgottlieb@psr.org